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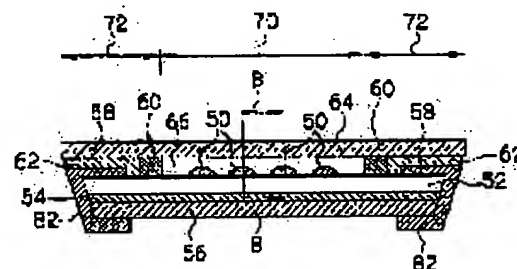
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(54) SOLID-STATE IMAGE PICKUP APPARATUS AND ITS MANUFACTURING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a compact, inexpensive, solid-state image pickup apparatus where a solid image pickup element having a micro lens has been packaged without sacrificing the functions of the micro lens.

SOLUTION: The solid-state image pickup apparatus has a semiconductor chip 52 where a solid-state image pickup element having a micro lens 50 mounted thereon is arranged. A transparent substrate 64 is arranged opposite to a micro lens arrangement region 70 of the semiconductor chip 52, the transparent substrate 64 is fixed to the semiconductor chip 52 at a region 72 being present around the region 70 by a sealing member such as an adhesive 62, and at the same time space 66 between both of them is sealed, thus preventing the micro lens from being covered with the adhesive and hence preventing the lens function from being sacrificed. Also, the solid-state image pickup apparatus has lead wiring for electrically connecting an electrode pad 90 to a rear electrode via the side surface of the semiconductor chip 52, thus achieving rear wiring and miniaturizing the solid-state image pickup apparatus. Further, packaging can be done in the state of a wafer, resulting in reducing manufacturing costs.



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